ROUTING

JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO. 00-071 95

[redacted]

FEB 15 22 55 '56

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

COMDR WESTERN DEV DIV INGLEWOOD CALIF

DATE-TIME GROUP X 15 0800	SECURITY CLASSIFICATION ~~CONFIDENTIAL~~
PRECEDENCE FOR: ACTION Priority	INFORMATION
☐ BOOK MESSAGE	☐ ORIGINAL MESSAGE
☐	CRYPTOPRECAUTION ☐ YES ☐ NO
REFERENCE TO MESSAGE	
IDENTIFICATION	CLASSIFICATION

TO:

COMDR ARDC BALTIMORE MD

AC—PARAPHRASING NOT REQUIRED EXCEPT PRIOR TO CA-
GORY B ENCRYPTION. PHYSICALLY REMOVE ALL EXTERNAL REF-
ERENCES BY DATE-TIME GROUP PRIOR TO DECLASSIFICATION.
NO UNCLASSIFIED REFERENCE IF DATE-TIME GROUP IS QUOTED."

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

INFO:

FROM: WDTP-2-5-E FOR: MAJOR GENERAL JOHN SESSUMS

THE APPLICATION OF HIGH PERFORMANCE SOLID ROCKETS TO AF VEHICLES HAS BEEN LIMITED BY DEFICIENCIES APPARENT IN CURRENT SOLID ROCKET UNITS. POTENTIAL GAINS ATTAINABLE THROUGH APPLICATION OF IMPROVED SOLID ROCKETS ARE, HOWEVER, SIGNIFICANT. AS COMPARED TO LIQUIDS, THEY OFFER INSTANT TACTICAL AVAILABILITY, THE POSSIBILITY OF LONG PERIODS OF INERT STORAGE WITH NO MAINTENANCE, GREATLY REDUCED REQUIREMENTS WITH REGARD TO COMPLEXITY OF LAUNCHING BASE OPERATIONS, AND GREATLY SIMPLIFIED LOGISTIC NEEDS. SEVERAL SIGNIFICANT APPLICATIONS FOR SOLID ROCKETS IN FIELDS OF AF INTEREST EXIST, INCLUDING MAIN POWER PLANT FOR IRBM, BOOSTER FOR NUCLEAR ROCKET ORBITING SATELLITE, MAIN POWER PLANT OR BOOST FOR ICBM, AND BOOST ROCKET FOR LOW ALTITUDE NUCLEAR RECONNAISSANCE RAM JET. ALTHOUGH IN EACH OF THESE INSTANCES EMPLOYMENT OF A SOLID ROCKET OF AN ADVANCED TYPE INDICATES MANY POINTS OF SUPERIORITY OVER THE EQUIVALENT LIQUID, TIME SCALES INVOLVED IN THE DEVELOPMENT OF THESE UNITS ARE VERY MATERIALLY GREATER THAN THOSE REQUIRED FOR LIQUID ROCKET PROGRAMS. THIS CONDITION STEMS DIRECTLY FROM THE FACT THAT LITTLE FUNDAMENTAL WORK HAS BEEN PURSUED

WDT

SECURITY CLASSIFICATION [redacted] ~~CONFIDENTIAL~~

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JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO.

[redacted]

FEB 15 22 56 '56 00-071 9

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator) COMDR WESTERN DEV DIV INGLEWOOD CALIF	DATE-TIME GROUP Z 25 1600	SECURITY CLASSIFICATION ~~CONFIDENTIAL~~
	PRECEDENCE	ACTION PRIORITY / INFORMATION
TO: COMDR ARDC BALTIMORE MD	☑ BOOK MESSAGE	☐ ORIGINAL MESSAGE
	☐ MULTIPLE ADDRESS	☐ SMALL ☐
	REFERS TO MESSAGE	
INFO:	IDENTIFICATION	CLASSIFICATION

"AC— ... GORY B ENCRYPTION — PHRASING NOT REQUIRED EXCEPT ... PHYSICALLY REMOVE ALL INTERNAL REFERENCES BY DATE-TIME GROUP PRIOR TO DECLASSIFICATION — NO UNCLASSIFIED REFERENCE IF DATE-TIME GROUP IS QUOTED."

FROM: WDTP-2-5-E FOR: MAJOR GENERAL JOHN SESSUMS

IN THE FIELD OF SOLID ROCKET IMPROVEMENT FOR THE HIGH PERFORMANCE CATEGORY DURING THE LAST FIVE YEARS. VERY SIGNIFICANT GAINS CAN BE EXPECTED TO BE ACHIEVED WITH REGARD TO HARDWARE WEIGHT, GRAIN FABRICATION TECHNIQUES, INTERIOR BALLISTICS IMPROVEMENT, DEVELOPMENT OF THRUST VECTOR CONTROL AND SHUTOFF TECHNIQUES, AND IN SUPPORT AREAS SUCH AS INSULATING COATINGS, HIGH TEMPERATURE PLASTIC ADHESIVES AND IGNITION ADVANCES. THE NAVY PROGRAM IN THIS FIELD, HOWEVER, INVOLVES IMMEDIATE PROSECUTION OF A SPECIFIED POWER PLANT PROGRAM IGNORING THE LARGE POTENTIAL GAINS WHICH COULD RESULT FROM EVEN ONE YEAR OF BASIC DEVELOPMENT ACTIVITY. IT IS THEREFORE FELT THAT THE RESULTS OF THE NAVY PROGRAM WILL BE OF QUESTIONABLE UTILITY TO THE AF SINCE THEY MERELY INVOLVE A REHASH OF OLD TECHNIQUES WHICH HAVE BEEN REPEATEDLY EMPLOYED IN THE PAST TO PRODUCE ENGINES OF SUCH MEDIOCRE PERFORMANCE AS TO PRECLUDE THEIR USE IN AF PROGRAMS OF THE TYPE INDICATED ABOVE. IT IS THEREFORE RECOMMENDED THAT THE AF RETAIN ITS INDEPENDENT SOLID ROCKET PROGRAM AND PROSECUTE THIS AS VIGOROUSLY AS POSSIBLE TO MEET FUTURE MISSILE REQUIREMENTS AS THEY MATERIALIZE.

WDT

	SECURITY CLASSIFICATION ~~CONFIDENTIAL~~	PAGE 2 OF 2 PAGES
DRAFTER'S NAME (and signature, when required) E. N. HALL, LT. COL., USAF	RELEASING OFFICER'S SIGNATURE SIGNED C. H. TERHUNE, JR., COLONEL, USAF	
SYMBOL WDTP / TELEPHONE 1048	OFFICIAL TITLE DEP COMDR, TECH OPNS	

DD FORM 1 OCT 49 173 REPLACES NME FORM 173, 1 MAY 49, WHICH MAY BE USED.

[redacted]

DOWNGRADED AT 3 YEAR INTERVALS; DECLASSIFIED AFTER 12 YEARS. DOD DIR 5200.10

From Col Oder —

19 Feb 1956

WS 117L major / objectives for first half of 1957

1. Preliminary Operational Concept
2. Definitize Lockheed Contract
3. Establish test facilities needs and programming.
4. Demonstration of ~~air~~ ~~[illegible]~~ some components in experimental . models – breadboard configuration.